

## Claims

1. A genetic motif extracting and processing apparatus comprising:
  - gene arrangement information storing means for storing clarified gene arrangement information;
  - gene arrangement information inputting means for inputting at least one piece of gene arrangement information;
  - motif extracting means for extracting a genetic motif from the gene arrangement information input by said gene arrangement information inputting means;
  - gene arrangement information retrieving means for retrieving, based on the motif extracted by said motif extracting means, gene arrangement information including said motif as a part thereof, from said gene arrangement information storing means; and
  - gene arrangement information adding means for adding, the gene arrangement information retrieved by said gene arrangement information retrieving means, to the gene arrangement information input by the gene arrangement information inputting means.
2. A genetic motif extracting and processing apparatus according to claim 1, further comprising
  - motif extraction range designating means for designating, in the gene arrangement information input by the gene arrangement information inputting means, a motif extraction range for the motif extracting means,
  - wherein the motif extracting means extracts a genetic motif from within the extraction range designated by the motif extraction range designating means.
3. A genetic motif extracting and processing apparatus according to claim 1, further comprising gene arrangement information editing means for editing the gene arrangement information.
4. A genetic motif extracting and processing apparatus according to claim 1, further comprising motif editing means for editing the motif extracted by the motif extracting means.

5. A genetic motif extracting and processing apparatus according to claim 1, further comprising alignment means for alignment-processing a plurality of gene arrangement information input by the gene arrangement information inputting means.
6. A genetic motif extracting and processing apparatus according to claim 1, further comprising:  
motif storing means for storing motifs; and  
motif registering means for registering the motif extracted by the motif extracting means into said motif storing means.
7. A genetic motif extracting and processing apparatus according to claim 6, further comprising motif displaying means for displaying at least one motif from those motifs registered in the motif storing means.
8. A genetic motif extracting and processing method comprising:  
a gene arrangement information inputting process for inputting at least one piece of gene arrangement information;  
a motif extracting process for extracting a genetic motif from the gene arrangement information input by said gene arrangement information inputting process;  
a gene arrangement information retrieving process for retrieving, based on the motif extracted by said motif extracting process, gene arrangement information including said motif as a part thereof, from a gene arrangement information database; and  
a gene arrangement information adding process for adding, the gene arrangement information retrieved by said gene arrangement information retrieving process, to the gene arrangement information input by the gene arrangement information inputting process.
9. A recording medium recorded with a genetic motif extracting and processing program for realizing:  
a gene arrangement information inputting function for inputting at least one piece of gene arrangement information;  
a motif extracting function for extracting a genetic motif from the gene arrangement information input by said gene arrangement

information inputting function;

a gene arrangement information retrieving function for retrieving, based on the motif extracted by said motif extracting function, gene arrangement information including said motif as a part thereof, from a gene arrangement information database; and

a gene arrangement information adding function for adding, the gene arrangement information retrieved by said gene arrangement information retrieving function, to the gene arrangement information input by the gene arrangement information inputting function.

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